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Emotional and affective geographies of sustainable community leadership: A visceral approach

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ABSTRACT

In this paper, we aim to better understand what mobilises people into being and becoming named as leaders in sustainability in the places where they live. Our premise is that action for sustainability originates with passionate individuals who lead action at the local level. We present our analysis of a walking sensory ethnography conducted in 2012 undertaken as part of exploratory research on adaptation to climate change in the coastal town of Dunbar, Scotland. We sought to understand the complex, embodied and sensorial ways in which places, and our experiences of connection to places, are constituted. The starting point for our discussion is the recognition of the intricate, deeply entangled relations between the human and nonhuman world that have historically been obscured by western understandings of a pristine nature set apart from the world of human culture. Building on literature under the umbrella of "Anthropocene feminisms", we suggest that a visceral approach as conceptualised in the work of Hayes-Conroy and Hayes-Conroy (2008) and Hayes-Conroy and Martin (2010) offers embodied knowledge as a radically relational view of the world that allows an entry into the ways in which the micro-scale of the body intersects with the global scale of political praxis. Our detailed discussion of one of our research participants provides an example as to how this individual came to feel connected through a shared sense of consciousness with the human and non-human. In this exploration, we found possibilities in thinking beyond the otherwise paralysing narratives of anthropogenic climate change. Our argument is that this focus brings to the fore the transformative capacity of viscera, emotional and affective responses to anthropogenic climate change, and that these are integral to hope, albeit this is a hope that needs to consider capacity and vulnerability in new ways.

1. Introduction

The Anthropocene is a recurring theme in scholarship that seeks to better understand the effects of human activity on the planet. The notion is ironic: at the very moment when the figure of 'man' (sic) has become untenable in social and cultural theory, move are afoot to inscribe his name in planetary history. As Haraway exclaims, 'Surely such a transformative time on earth must not be named the Anthropocene!' (2016, 31). Countless other creatures have left their mark on the fossil record, from cyanobacteria to Trilobites to dinosaurs to pack rats, but no single creature has yet become stratigraphically definitive. To date, geological periodisation has tended to centre on geological features rather than the species that produced them: Carboniferous refers to coal deposits, Cretaceous to distinctive chalky beds, and Jurassic to the Jura mountains. Yet, the concept of the Anthropocene strikes a chord, perhaps because of how it encapsulates the contradictions of post-humanism, registering 'both our culpability and our fragility as humans' (Blasdel, 2017, unpaginated); how we are trying to escape anthropocentrism while remaining trapped within it; and how humans are trying to come to terms with planet-scale change through human thoughts and words. Indeed, some scholars point out that the contradictory responses of grief and indifference for our "dying planet" arise out of feelings of complicity and inadequacy (Shaw and Bonnett, 2016). How might we address this impasse and point towards some productive avenues for public, scholarly and policy debate?

While the impacts of the Anthropocene may seem overwhelming, some scholars consider the grief aroused as an inherent part of a process that can mobilise or immobilise the individual; that grief can paralyse us, but grief can also move us in various ways (Shaw and Bonnett, 2016; Stoll-Kleemann et al., 2000). The starting point of much pro-

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environmental research that seeks to change behaviour often focuses on education, the assumption being that this will enable people to make informed choices. This also often assumes people make cost-benefit or rational-reflective decisions about their consumption practice. Such an approach asserts that individual consumers make their own decisions about what to consume. Yet such consumption decisions and practices happen in particular socio-material contexts. In this paper we are interested in examining the role in these contexts of community leaders, as champions of pro-environmental education campaigns at ground-level. We argue that the choices and decisions that individuals make to become leaders in sustainability are made in relation to other people and places, not just on the basis of individual needs or desires. As a consequence, rather than defining leadership through an individualisation thesis, we focus on sustainability leadership as a set of practices, something people *do*, rather than someone they *are*. We suggest that this is significant because it makes evident the ways in which the politics of affect is an outcome of how various elements of daily life are assembled and shape action. Framed in terms of the performative experience of those doing the work of sustainability leadership, the politics of affect may help shed light on the practical organisation of specific groups and activities. Here, we conceptualise these performative experiences as embodied practices that mediate relationships through interactions with the people and things, across the life-course. To do so we follow Hayes-Conroy and Hayes-Conroy's (2008) visceral framework to help better understand our embodied connections the non-human worlds, and specifically the politics of affect. As Head (2016: 6) argues, 'we need to urgently find ways for society to bear, and bear witness to, the painful emotions around climate change.' In this article, our attention turns to the role of the visceral in mobilising sustainability leadership. Our suggestion is that a visceral approach brings to the fore the importance of emotions and affects in the politics of everyday sustainability.

2. Conceptual considerations

The starting point for our discussion is the recognition of the intricate, deeply entangled relations between the human and nonhuman worlds. Such relationships have historically been obscured by western understandings of a pristine nature set apart from the world of human culture. In a context of rapidly accelerating anthropogenic environmental change, a range of perspectives have challenged such binary thinking; for example, actor-network theory, which rejects human centrality and instead focuses on the ways in which power is organised through associations between both human and non-human actors (Munro, 2009); posthumanism, such as Haraway's work on hybridity, naturecultures and interspecies relations (Haraway, 2016); new materialism, which rethinks the relations between matter and the social (for example, Barad, 2007; Bennett, 2010; Braidotti, 2013, 2014; Dolphijn and van der Tuin, 2012; van der Tuin and Dolphijn, 2010); and philosophical work on such themes as speculative realism and object orientated ontologies (for example, Bryant et al., 2011; Harman, 2015).

Yet, as Bosworth (2017: 22) argues, the recent work in what is known as new materialism is hampered by its 'overt focus on constitutive connections amongst bounded, human-sized objects and timescales and a political preference for the local and everyday.' He points out that while these approaches make us aware of the networks and relations that produce knowledge, what they do not reveal is how such situations arose nor why only certain arrangements provoke response. Instead, he proposes the framework of feminist geophilosophy. This theoretical approach understands human corporeality and subjectivity in relation to the geologic that 'well exceeds our human spatial and temporal cognition or experience'. Furthermore, a feminist geophilosophy 'positions itself in both a critical and creative relation to the geo-history that we inherit' (Bosworth, 2017: 23). Addressing the challenges of the Anthropocene therefore becomes 'an exploration of *that which is shared or held in common* between human bodies and earth forces' (Bosworth, 2017: 33; emphasis in original). And, of course, such reconfiguring of human-earth relations in terms of permeability is fundamental to Indigenous philosophies that, as MacLure (2015: 95) reminds us, have at their core 'acknowledgement of the agency of place and land, and relationality across human and non-human entities' (see for example, Bawaka Country et al., 2015; Wright, 2015). Thus, a feminist geophilosophy draws our attention to processes rather than meanings that sustain practices and performativities. Moreover, these practices and performances are always understood as more than a human achievement. They involve the enrolment of non-human forces alongside sets of ideas that structure what people do. These ideas are integral to a recent body of literature under the umbrella of "Anthropocene feminisms" (Colebrook and Weinstein, 2015) which proposes that we must, following Haraway (2014, 2016), acknowledge and 'maintain *both* the human and the nonhuman in a monstrous coupling that is at once of the earth and yet troublingly unnatural' (Colebrook and Weinstein, 2015: 169; emphasis in original), because while we may conceptualise "man" as a construction, simultaneously 'the human is a real force that has marked the planet' (p. 172).

Building on feminist new materialism, we suggest that a visceral approach as conceptualised in the work of Hayes-Conroy and Hayes-Conroy (2008) and Hayes-Conroy and Martin (2010) offers embodied knowledge as a radically relational view of the world, one that can 'entertain the *inclusive* disjunction: man is, and is not' (Colebrook and Weinstein, 2015: 172; emphasis in original). As these scholars point out, the term "visceral" is deployed to indicate 'a non-dualistic approach to reality that emphasises the capacity of the mind and body to judge, think and perform' (Hayes-Conroy and Martin, 2010: 269). Thus, the visceral is a biosocial concept that conceives of bodies as both material *and* social entities that transcend dualisms of mind/body, inside/outside and local/global. A visceral approach brings the "minded-body" (Hayes-Conroy and Martin, 2010: 270) to the fore. This conceptualisation of embodied practices that mediate relationships attends to affect. In this regard, drawing from Probyn's (2000) translation of Deleuze's ideas, affect is the manner in which psycho-social emotions condition behaviour and that simultaneously involves the senses – touch, sounds, taste, sight and smell. That is, affect is conceived as the push in the world as an outcome of embodied knowledge that is once non-cognitive *and* cognitive. Attention turns to emotions and feelings articulated through everyday encounters or convergences that either increases or decreases the body's capacity to act. In this regard, affects or bodily intensities may be conceptualised as a relational force.

The visceral, therefore, is significant to understanding the motivation and mobilisation of people in their everyday places. In exploring a grounded approach to sustainability, we take on board Head's (2016: 12) call for deeper engagement with 'the "small" issues of culture' because, as she goes on to explain:

> [at] a time when top-down intergovernmental action seems not to be up to the task, survival may depend on more localised vernacular understandings and practices. Important intellectual resources come from places understood as marginal to environmental preservation; Indigenous engagements, gardens, suburbs, farms, domestic homes. We can revisit empirical evidence from these to consider capacity and vulnerability in new ways (Head, 2016: 13).

As an example, we present our analysis of a walking sensory ethnography conducted in 2012 undertaken as part of exploratory research on adaptation to climate change in the coastal town of Dunbar, Scotland. In this project we sought to explore the social dimensions of climate change. However, rather than thinking of environmental behaviour through the lens of social-psychological approaches that emphasise processes of self-actualisation, our interest lay in the significance of the politics of emotions. Therefore, the over-arching questions that drove the project from which the data discussed here arose, were: what does it *feel* like to engage in everyday practices that relate to climate change and sustainability? And, what do those feelings

do – as a visceral force that generates a kind of 'push' in the world (Thrift, 2004)? In addressing these questions, we sought to understand the complex, embodied and sensorial ways in which places, and our experiences of connection to places, are constituted. A visceral approach allows an entry into the ways in which the micro-scale of the body intersects with the global scale of political praxis (Clough, 2012; Bosco, 2006, 2010), in this instance that of the Anthropocene. In considering this, we suggest the subject of the community leader is itself an outcome of a process that involves assembling together human and non-human things that sustains a sense of self as an "activist" or "leader" or "advocate for sustainability". This assemblage, in turn, is significant to the generation of a politics of affect that can lead to change or transformation in human and non-human relations.

3. Methodological considerations

Dunbar[1] – a town located on the North Sea coast of East Lothian, about 30 miles east of Edinburgh – was selected as a site where there was evidence that members of the community were mobilising around sustainability, particularly through the activities of the community development trust, *Sustaining Dunbar* (https://sustainingdunbar.org/). Once the site of a large fishing fleet, Dunbar now functions as a dormitory town and sea-side day-trip destination by car or train. Everyday reminders of the question of sustainable futures are physically manifest in this town; not only in the limited number of fishing boats in the harbour, but also the proximity of Torness Nuclear Power Station and Aikengall Community Wind Farm. Furthermore, Dunbar is celebrated as the birthplace of the nineteenth century conservationist and activist John Muir, who was instrumental in promoting the preservation of wilderness areas. Dunbar is embedded in range of often conflicting environmental understandings and practices.[2] At the same time, with its idyllic coastal location, Dunbar has become home to many people seeking lifestyles centred less on capitalist social relations and more on collectivism. Perhaps not surprisingly then, Dunbar is home to a number of sustainability and environmental projects, notably 'Sustaining Dunbar', a charitable organisation and part of the UK's Transition Network (a network that supports communities to make the 'transition' to lower carbon lifestyles) and various related initiatives such as a community bakery and community woodland. These factors made it possible to identify community leaders for whom sustainability and sustainable practices were 'live' issues. We recruited participants through a snowballing approach, beginning with the Dunbar Community Council, which then generated a list of key community leaders to contact.

After human ethics approval was granted by the Monash University Human Research Ethics Committee (LR 2012000320), participants were recruited through the Dunbar Community Council, whose secretary suggested appropriate community leaders to contact. Of the ten individuals approached, eight accepted our invitation to participate in our walking sensory ethnography, which combined semi-structured interviews, and a 'go-along' alongside audio-recordings to capture the politics of affect and emotion in participants' embodied understandings, practices and responses to climate change. The semi-structured interview invited participants to discuss everyday places of significance in their relations with the environment. These places ranged from the home or garden through to public places such as parks, community halls, the harbour and High Street. During the interview, participants prepared a rough touring map of these everyday places. Next, taking our lead from Pierce and Lawhon (2015) on walking-as-method, and Duffy and Waitt (2011) on audio-recording methods, each participant was invited to show the researchers the key places identified, explaining their significance and suggesting key sounds to be audio-recorded. Participants then took the researchers for a go-along, on foot and in some cases also by car and bicycle. The researchers made additional field audio-recordings guided by the interview responses.

In this approach, we were alive to how the politics of walking is conceived differently between scholars. Some conceive walking as structural co-ordination of people's everyday routines (Augoyard, 2007), epitomised in studies on the practices of walking in non-urban places, which sometimes romanticise the 'male, solitary and self-reliant' walker in "his" encounters with "nature" (Wylie, 2005: 235). Others conceptualise walking as a "tactics" of resistance against the "strategies" of those in a position of power (architects, engineers and planners) through the improvisations and "making do" of walking routines and practices (de Certeau, 1984). And yet others, more attuned to the body, interpret fluctuating walking rhythms with other modes of transport as providing clues to constituting "rights to the city" (Lefebvre, 2004). Here, we build on embodied approaches and, like Wylie (2005: 240), those that focus on walking as an 'everydayness of being-in-the-world'. This banality opens up potential for uncovering our relations with the non-human world.

Such a methodology begins with the body; we sought access to embodied responses in and to place, which meant an exploration of not only how individuals felt connected to place but also how we as researchers could "listen in" to these affective and emotional relations. Therefore, listening takes on a broader aspect, acknowledging that our senses are interconnected (Pink and Howes, 2010), with the differing senses 'reinforce[ing] one another, giving us a unified picture of everyday reality taken from multiple perspectives' (Cytowic, 2010: 46). The meanings we attribute to sensory information are culturally constructed, hence the senses therefore have a 'role in *framing* perceptual experience in accordance with socially prescribed norms' (Classen, 1997: 402; italics in original). Walking-as-method, alongside the collection of audio-recordings, is strategically used as a means to enter into the everyday lives of our participants.

4. Olivia and sustainability

In this article we present data produced through our interactions with Olivia, who at the time of our interview was a student support worker at the local secondary school and convenor of the Dunbar Community Woodland Group. We were particularly taken by Olivia's strong commitment to providing young people in Dunbar with life skills based within sustainable practice, and the ways in which these goals were strongly infused by her emotional, affective and embodied geographies with the Lochend Woods, Dunbar. The walk-along we took with Olivia enabled us as researchers to be viscerally affected and gain some sense of the social and psychological processes that sustained as sense of belonging to this place. The audio-recordings provide a rich record of our unfolding encounters as facilitated by Olivia. Our analysis is premised on the conviction that these audio-recordings register emotional and affective resonances of the intensities arising between the researcher, the research participant and the place in which we walked. Our example offers insights to affects, emotions and embodiment expressed through sounds, imagery, tone and texture. These things demonstrate the ways in which humans can be permeable to, and able to reciprocate with, a changing environment. Our account of walking with Olivia illustrates how the emotions of grief and hope that make up her unique geography of Dunbar matter for mobilizing and sustaining her commitment to sustainability.

Olivia and her partner moved from Edinburgh to Dunbar approximately 20 years earlier, seeking a larger house for the family. They found that they quickly became part of the Dunbar community. As she recalled: 'At the school gate you get to know all immediately! – yeah,

[1] We have opted to use the real name of the town to acknowledge its specific geography and history. We have, however, used pseudonyms for our research participants.

[2] For example, the John Muir Visitor's Centre in Dunbar circulates particular western understanding of nature as both "pristine" and "wilderness", where certain people and activities are positioned as a problem.

we've got a great network of friends here.' Underpinning Olivia's daily life is a strong commitment to environmental issues and self-sufficiency, and she wants to share this particularly with younger people resident in Dunbar:

> my kind of side agenda I suppose of things is to – and I've said it to the kids as well – that I want you guys to be able to grow your own food. Um, so that when you leave school and if food in the shops gets really expensive because of the transport issues around food, then you at least will know what to do with a packet of seeds.

These comments can be understood in relation to Olivia's two key roles in the town of Dunbar. First, as a pupil support assistant, in which capacity Olivia is associated with the community's allotment project, including rural skills and horticultural studies courses that support an agricultural college. Second, as convenor of a community woodland group originally set up to preserve and manage the Lochend Woods at the edge of the town, Olivia's work has been extended because of the woodland group's remit to include reintroducing woodland skills and management of resources, most recently focussing on green wood working skills ('green' in this context refers to working with unseasoned timber rather than as a marker of sustainability per se – but as we will see there are overlaps between the two meanings). Both roles are underpinned by Olivia's focus on sustainability, not only in terms of environmental issues, but also how sustainable practices can help address some of the challenges faced by individuals within the community in terms of ensuring basic needs are met. As she explained:

> What [direction] we want to move in now is to deliver green wood working courses. There's a group of us from going to another woodland group in the Borders who are more advanced than we are, in terms of everything's in place … and really want to get kids involved in that – not just kids, adults too – and learning some green wood working skills and whatever's lying about, you know, windfall stuff, you know, wind fall material, and that can be made into beautiful objects, or functional furniture – little stools and things. And just to get people to realise that we can make things just with what's lying around us.

Olivia's stated agenda is focused on how to ensure that younger generations can be more sustainable, and, more specifically, how to build the confidence of those defined in terms of low academic achievement. As Olivia points out, these children are vulnerable:

> I've seen that whole thing happens with kids, the ones I'm working with as a pupil support worker, they pick up the vibe from some of the teachers of academic subjects, that they're not valued, so they just kind of rest and give up and lose interest. Whereas, if you can get them on board with all the practical skills, you don't lose them… And a lot of kids will, they, just wouldn't leave Dunbar. And if you can build up the confidence to just try things … dealing with the public, and who knows what they might move on to. But it's just to get them to make that initial step. To be well, self-sufficient! You know, just to have that bit of confidence and yep, so that's where I'm coming from.

Given her connections to the Woodland Group, it was unsurprising that Lochend Woods was a significant feature in her map. Her description of this place while she mapped out these everyday places also disclosed the prominence of the woods in her imaginings of Dunbar:

> Ay, the woods is a kind of [laughs] described it before as, the woods is shaped kind of like a hand, and the new houses are in between it, ummm…I'm thinking where all the trees are and the houses are kind of the bit… and then this is all woods in-between… There's loads of artists and crafty people that choose to live this end of the county actually. It's great. I think that's what helps to make the community so interesting. Such a diverse range of people. And then there would be kids playing as well, so there we are.

What we hear arising out of this mapping activity is Olivia's reading of the woodlands as a place of learning, especially in terms of being able to live sustainably, and that the values associated with this becomes an attraction for a range of people. Indeed, her description of this place – "like a hand" – resonates strongly with her sense of the woodland as a nurturing site. While her comments point to personal and emotional connections to this particular site, these descriptions nonetheless retain a focus on how Olivia connects others to the woodlands. In thinking through Olivia's work, we wish to carefully consider the encounters of such sensual and visceral experiences between the adults, children and the woodland through affective relations. In responding to the felt experience of engaging in everyday practices that relate to sustainability, we seek to shift thinking from an anthropocentric focus of the world as resource and instead acknowledge an emerging co-presence of human and non-human. A focus on viscerality opens up our exploration in ways that 'take seriously the world's own forces…a world captured in the tension of its present tense of becoming' and 'the active role we too play in actualizing that which happens' (Dewsbury et al., 2002: 439). In addition we use an assemblage framework as a means to capture the forces that emerge within networks of material and social entities that go on to shape a politics of affect that mobilises Olivia, and sustains her sustainability leadership in Dunbar.

5. Emotional and affective frameworks for attending to the Anthropocene (see Fig. 1)

Olivia took us on a walk through Lochend Woods two days after the interview, and we were given a detailed tour of the site and shown fragments of crumbling ruins from the original Lochend estate, which was granted to the Baillie family in the early seventeenth century (Lochend Woods website). While walking towards a circle of yew trees we discussed an activity that Olivia school children participate in as a means to, as she described it, "bond with nature" (walk-along interview 12 July 2012);

> During term time I'd be here, couple of times a week with groups from the school, just to do different activities… one of my favourite ones is "find a friend" … the group of kids are put into pairs, one of them is blindfold, and the other is … it's a game of trust as well as sort of bonding with nature. The other kid has to take them to a tree that they have chosen. And they then, the blindfolded person has to get them to the tree that's been chosen for them by touch only, and by, well, smell and whatever. And so, once they think they've familiarised themselves enough with the tree, they're taken back to where they started, blindfold removed and then they're set off to find the tree. And sometimes it's quite ah … a strange feeling, ah, having participated in myself… So you can just imagine – take a note of the bark – is it smooth bark? Has it got bumps in it? A ridged bark like this – aye it's an ash – um has it got a thick trunk? Has it got [a wide] trunk? and then so you go back to base, and then, so the tape [over their eyes] is meant to disorient them as well. I remember the first time I did, it was just so strange. All of a sudden, those connections you made in your brain between what you felt with your hands and what your eye is now seeing and it's quite – strange things happen in your brain.

In her description, we hear the ways in which participants are required to explore more sensual and visceral connections and experiences of the woodlands. While telling us about this activity, we moved closer to a yew circle, and our conversation turned to the role of the body in navigating through a location, and how important different senses become when you are not able to see. At this point, we all noted a drop in temperature and how it had become darker, and we began to talk about the yew trees and associated superstitions with such tree circles. At this point, Olivia was prompted to tell us the following:

> I don't know the ins and outs of the yew tree, I just know it's got

Fig. 1. (1) A visceral methodology; (2) Woodland management; (3) Site of the yew circle.

some mystical qualities. But, I know a bit about the rowan tree. The rowan tree has importance in Scotland, to keep away the evil spirits. And it was traditionally planted when a baby's born. And the, this really came home to me a few years ago now, but when I was born in Dundee, my father planted a rowan at the gate. In the hope that [laughs] that it might keep the evil spirits off me! And, um, you know I'd grown up with this tale, and I remember when I was a little girl the tree – just not much bigger than me – and by the time I was in my 30s it was coming into a really nice mature tree. And then my father by that time was – well my mother had died a few years before – my father was [sigh] getting older and had dementia, so we had to move him out of the house and we sold the house. And…that year…um … it was … it was coming the run up to Christmas, and for about a week I was dreaming about my rowan tree. I dreamt it had withered and died – a really, really vivid dream. And uh … waking up in the morning and just kind of exhausted. 'Cos it had been really hard work so the day after, the weekend, after that week, we'd gone up to visit my father's neighbours. Just to give them a wee thank you present for looking out for my dad. And, um, as we drove round the corner I could hear the chainsaws….[pause] it still upsets me…[tears well up, then after a few moments]… I'm absolutely fine now, but that was one thing – and oh! I was just completely traumatised by that, you know (walk-along interview 12 July 2012).

In the transcription above the pauses and non-lexical vocables are included to reflect something of Olivia's affective responses in telling us of her rowan tree. As this story unfolded we were witness to her distress at the tree being cut down, and Olivia's memory and the very emotional response it generated arose not out of the sound alone, but the ways in which memory, the viscerality of the body, our discussion about the effects of sound, and the engagement with the place in which this discussion occurred through our non-visual senses all came together in a particular configuration. What is notable is the difference between Olivia's responses when we interviewed her at the East Lothian Council's main office in Dunbar and when we walked through the Woodlands when immersed in its sights, sounds, smells and feel. While speaking to us at the Council building, Olivia's passion for sustainability was evident as she spoke to us about wider issues of education, training and making sustainable choices. However, the *in situ* discussion brought to the fore a much more personal set of affects and associations.

We suggest that such moments of distress also have the potential to lead to hope, and this is where a politics of emotion and affect lies. In geography, the dominant approach to affect can be traced through the work of Spinoza, Deleuze (1988) and Massumi (2002), in which affect is understood as the bodily capacity to affect and be affected. However, what we were interested in determining in this project is how individuals can help change other people's understanding of the world; that is, how does an individual mobilise the power inherent in affect? In addition, it is not simply a mobilising of affect between *persons*; rather what Olivia's retelling of the loss of her rowan tree makes apparent is the significance of our connections with the material, the social and cultural worlds as well as that of the non-human world. And through this assemblage, the affective power of leadership arises out of this configuration of human and non-human. As Probyn (2004: 29) explains, 'what constitutes an affective response is hugely complex, and is in part the result of an embodied history to which and with which the body reacts.' Thus, as Bosworth (2017) reminds us, such everyday encounters links the geologic with human spatial and temporal scales; a meeting with trees initiating a catalytic relationship of biological and social processes of the past, future and present. Therefore, we need to acknowledge and make visible (as well as audible, olfactible, tactile and so on) these traces that emerge and mobilise a politics of affect.

We suggest that one way these politics of emotion and affect are mobilised is through the intimate connection made between human and non-human in the activity of walking. Walking can be conceived as providing insight into the process by which we start to make sense of our self and place through the affective, emotional and embodied knowledge of the different things that we create enroute. In the example of Olivia, while she walks through the woodland with us, she is actively involved in making sense of herself and that specific place. This process reveals insights into what mobilises her as a community leader. Her embodied response triggers grief from the loss of a rowan tree that was part of her life history and held great significance for her. Reflecting on this data some years after the research took place, we are inclined to wonder whether Olivia's grief might have been part of what motivated her sustainability work. This grief is mobilised in the present and has the potential to mobilise others through the capacity of affect to induce and sustain collective action (Clough 2012). This is significant as Head and Harada (2017: 36) drawing on Ahmed (2004), emphasise in their exploration of the emotional labour of climate change, we cannot distinguish between public/private or individual bodies and collectivities because emotion is 'something that emerges in "in-between" spaces that is, between subjects and between subjects and society… Emotions here are performative in that they work to define the boundaries of subjects and orient people towards particular collectivities.' In terms of how leadership in sustainability emerges, what Olivia's feelings demonstrate is the significant potential of an individual's grief in contributing to a mobilisation of hope. In the example discussed in this article, Olivia's grief is generated through encounters with others – the unfolding of a narrative that linked memories and relationships with humans and non-humans – that brings into being a multiplicity of relations in which the individual is entangled. This is not to contain the political affect of grief *within* the individual but, as feminist geophilosophy (and feminist frameworks more broadly) propose, what we need to consider is how grief as an inherent part of a process that can mobilise (or immobilise) actions (or inactions) with (human nd non-human) others. As Frazer and Waitt (2016) propose when considering the action of pain on bodies while volunteering,

> [d]ifferent affective and emotional intensities of pain—entangled in ideas, things, bodies and memories—operate to differentiate our attachment from this or that place. Pain is understood as productive

> in this differential process of connection as we find ourselves making, remaking or unmaking borders as we move towards or away from particular places, objects, bodies and things (p. 180).

Olivia's overall joyfulness and hope, as expressed through her work with children and sustainable practices, is attached to her experience of grief and pain that is embedded within personal relations with the non-human world. Yet, rather than being overwhelmed by this grief, Olivia instead channels this into an ethics of hope that is expressed in and through her teaching practices and care of woodland – and this ethics of hope is significant to understanding how we 'dwell in the world' (Frazer and Waitt, 2016: 187) in the period of the Anthropocene. An emotional and affective geographical understanding of the everyday world is, therefore, needed because without acknowledging the role this plays in all arenas of daily life we fail to understand how we 'both know, and intervene in, the world' (Anderson and Smith, 2001: 7).

For geographers, the interest in emotion and affect lies in how these aspects of personal and social life are integral to concerns of place, power, subjectivity, and belonging. For example, Anderson's (2016) work on how 'collective affects are part of the sites, networks, and flows of neoliberalism' (p. 735) enables us to consider how then these neoliberal affects are integral to translating neoliberal reason into policies and projects (p. 736). Nonetheless, key to our knowledge of the world is our visceral, emotional and affective relations in and with place; they

> have tangible effects on our surroundings and can shape the very nature and experience of our being-in-the-world… our sense of who and what we are is continually (re)shaped by how we *feel*. Similarly, the imagined or projected substance of our future experience will alter in relation to our current emotional state (Davidson and Milligan, 2004: 524; emphasis in original).

The project discussed here started from the premise that decisions made within communities are better understood in terms of embodied, visceral knowledge: that the processes and practices that shape our responses arise out of the transitory qualities of social and material relations that co-constitute subjectivities and place. Individuals come to *feel* connected, or not, in part through a shared sense of consciousness built around co-operation that can accommodate difference on a range of variables (social, cultural, economic, political), and this leads to the increased vitality and robustness of democratic interactions and outcomes. The emotional and affective dimensions of community are fundamental to the forming of social life but are often overlooked because of their perceived subjective and therefore "suspect" nature – particularly in their association with more primitive stages of evolution (Ahmed, 2004). The challenge is finding ways to access emotional experiences and bodily affects, which are not easily explained in words, and how these then shape relationships to community and place.

Olivia's concern with enabling survival in such drastically altered environments as predicted in the Anthropocene 'throw[s] up new opportunities and inverts some of the understanding of where vulnerability and capacity can be found' (Head, 2016: 151). Through our analysis of Olivia's network of relations, we add that a focus on the visceral enables a means to capture the transformative potential inherent in emotional and bodily responses to the Anthropocene. The impacts of the Anthropocene may seem overwhelming, yet feminist geophilosophy offers hope because it requires us to rethink our usual anthropocentric view of the world. It is not simply the "power of one" who is able to mobilise a politics of affect through bringing together both hope and grief. Olivia's grief, generated by memories and relationships that are then explored with us as we walk through the woodlands, is an arrangement of the human and non-human that is brought into an assemblage that generates an affective power that can move us to act.

6. Conclusions

Our research aim was to examine the sensory and affective dimensions of everyday life as it is constituted relationally with non-human worlds. The starting assumption was that efforts towards climate change adaptation always occur within the context of these relations, rather than starting with a "blank slate". As such, climate change adaptation needs, sooner or later, to engage with everyday human practices if it is to become more than a set of abstract aspirations. While many affluent people are sympathetic to the need to change to a low carbon lifestyle, issues of climate change adaptation are not solely educational, but ask us to consider how our everyday lives are embedded in specific cultural economies. For example, how narratives of fossil fuels are closely aligned with freedom and success in the western world, 'means that the barriers to low carbon transition are not just technical or financial, they are also mind-sets and socio-cultural practices' (Haarstad and Wanvik, 2017: 432). Combating such discourse is not aided by humanity's differing ethical, ideological and political approaches and how these inform interpretations of the past and imagine alternative futures (Agyeman et al., 2003; Hulme, 2009).

In devising the fieldwork for this project, the goal had been to uncover the significance of participants' visceral connections to place, and how these might inform responses to the larger context of climate change adaptation and sustainable practices. We began from the assumption that people will formulate their own "lived" versions of sustainability through the roles and responsibilities of their everyday practices and social networks. Such practices may differ from institutionally sanctioned "pro-environmental sustainable behaviours" promoted by governmental and other organisations. Nevertheless, they deserve to be taken seriously as a crucial (perhaps *the* crucial) point of contact between the discourse of sustainability and messiness of everyday life. In investigating life's work, we suggest it is essential to understand the role of the visceral in sustaining the connections that configure places and communities, and then consider what the visceral does in being and becoming a community leader for sustainability.

Our detailed discussion of one of these participants provides an example as to how this individual came to feel connected through a shared sense of consciousness with the human and non-human. We argue that it is impossible to understand how we 'know, and intervene in, the world' (Anderson and Smith, 2001:7) without acknowledging the dimensions of viscerality, emotion and affect. A visceral approach raises exciting possibilities in thinking beyond the otherwise paralysing narratives of anthropogenic climate change because it suggests ways to critically engage with everyday human and non-human interactions. In the example of Olivia and her work with youth, she appears to be working outside of the more conventional understandings of sustainability politics. In her musings on the significance of the woods and ensuring children have skills in self-reliance and self-confidence, Olivia speaks in terms of enhancing capacity as well as exploring sustainability through artistic creativity. Olivia's discussion about her work highlights her felt connections to place. Moreover, it is an individual's passion that drives these connections. Unlike Colebrook and Weinstein (2015), what we suggest is an ethics of hope arising out of a re-engagement with the visceral is significant to the emergence of leaders. In the Anthropocene we cannot simply state this is the end as we know it, we must also learn how to hope. This is not to 'resurrect the presumption that "man" [is] the fundamental unit' (Colebrook and Weinstein, 2015: 176). Rather, it is about considering capacity and vulnerability in new ways (Head, 2016), of holding the contradictions of "is, *and* is not" (Colebrook and Weinstein, 2015: 173). We also seek to think of a future beyond apocalyptic narratives. Like Head (2015), our concern is that while such narratives are important in jolting us out of our complacency with what is occurring, they may nevertheless destroy hope and paralyse action. Scholars attempting to make sense of this new epoch argue that we must question humanity's supposed centrality in the world (Bennett, 2010; Braidotti, 2013; Meillassoux, 2008). Yet, as Bosworth (2017)

reminds us, the Anthropocene jolts us into rethinking time because our encounters with the nonhuman can make us 'alive to the past, present and future simultaneously'. What is needed is a return to a deeper thinking that critically considers 'the nature of reality independently of thought and of humanity more generally' (Bryant et al. 2011: 3). As Head (2016: 13) suggests, this deeper engagement requires us to 'revisit empirical evidence' of a deeper engagement with 'the "small" issues of culture' (p. 12). We propose that responding to the challenges of the Anthropocene calls for greater recognition of the role played by our emotional and affective responses that connects us to place.

A significance aspects of a visceral approach is to encourage further engagement within the policy and public debate realm of the importance of emotions, affect and embodied knowledge in climate change/sustainability debates. Rather than dismissing emotion as something unhelpful – as occurs when following conventional western masculinist knowledge the prioritises the mind over the body – our work demonstrates the importance of affect, emotion and embodied knowledge to help illustrate what mobilises and sustains people to become involved in sustainability politics and become identified as community leaders. In addition, and contributing to burgeoning discussion on a 'cultural politics of responding to climate change' (Head, 2016: 2), we encourage further conversations around the relationship between grief and hope, and what can grief do in mobilising possibility.

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